### Measure Information: Normothermia

<table>
<thead>
<tr>
<th>Normothermia</th>
<th>Outcome</th>
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<tbody>
<tr>
<td><strong>Measure Type</strong></td>
<td><strong>Intent</strong></td>
</tr>
<tr>
<td></td>
<td>To capture whether patients having surgical procedures under general or neuraxial anesthesia of 60 minutes or more in duration are normothermic within 15 minutes of arrival in PACU.</td>
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<tr>
<td><strong>Numerator/Denominator</strong></td>
<td>Numerator: Surgery patients with a body temperature equal to or greater than 96.8 Fahrenheit/36 Celsius recorded within fifteen minutes of Arrival in PACU</td>
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<td>Denominator: All patients, regardless of age, undergoing surgical procedures under general or neuraxial anesthesia of greater than or equal to 60 minutes duration</td>
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<td><strong>Inclusions/Exclusions</strong></td>
<td>Numerator Exclusions: None.</td>
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<td>Denominator Exclusions: Patients who did not have general or neuraxial anesthesia; patients whose length of anesthesia was less than 60 minutes; patients with physician/APN/PA documentation of intentional hypothermia for the procedure performed</td>
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<tr>
<td><strong>Data Sources</strong></td>
<td>ASC medical records, as well as anesthesia administration and nursing records may serve as data sources. Clinical logs designed to capture information relevant to normothermia are also potential sources.</td>
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<tr>
<td><strong>Data Element Definitions</strong></td>
<td>Arrival in PACU: Time of patient arrival in PACU*.</td>
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<td>Intentional hypothermia: A deliberate, documented effort to lower the patient's body temperature in the perioperative period</td>
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<td>Neuraxial anesthesia: Epidural or spinal anesthesia</td>
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<td>Temperature: A measure in either Fahrenheit or Celsius of the warmth of a patient's body. Axillary, bladder, core, esophageal, oral, rectal, skin surface, temporal artery, or tympanic temperature measurements may be used.</td>
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* Definition of Arrival in PACU is consistent with the definition in the Procedural Times Glossary of the American Association of Clinical Directors as approved by the ASA, ACS and AORN.

### Rationale
Impairment of thermoregulatory control due to anesthesia may result in perioperative hypothermia. Hypothermia, even when mild, is associated with consequences such as increased susceptibility to infection, impaired coagulation, cardiovascular stress and cardiac complications, as well as post-anesthetic shivering and thermal discomfort. Several methods to maintain normothermia are available.

There is no literature available on variation in rates of normothermia among ASC providers. However, variability in maintaining normothermia has been demonstrated in other settings.

### Clinical Practice Guidelines
This performance measure is aligned with current guidelines regarding temperature management in patients undergoing general or neuraxial anesthesia lasting 60 minutes or more.
Frequently Asked Questions for Normothermia

What is the goal for this measure?
A reasonable goal for this measure is a normothermia rate in the 95%-100% range.

If the patient receives local or regional anesthesia, should they be included?
No, only patients having surgery under general or neuraxial anesthesia should be included in the denominator.

This patient was under general anesthesia for 60 minutes. Should they be counted?
Yes, any patient having general anesthesia that lasts for 60 minutes or more should be counted in the denominator.

We checked this patient's temperature 20 minutes after they arrived in PACU and it was 98.7 F. Since they were normothermic, do we count them in the numerator?
No, only patients who were normothermic within 15 minutes of arrival in PACU can be included in the numerator.

How do I collect data for this measure?
A sample data collection tool is available in Appendix B. A sample data collection log is available in Appendix C.

References


Lista F, Doherty CD, Backstein RM, Ahmad J. The impact of perioperative warming in an outpatient aesthetic...


### Normothermia

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Patient Identification Number</th>
<th>Date of Birth</th>
<th>Gender (M or F)</th>
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<table>
<thead>
<tr>
<th>Physician Name</th>
<th>Date of Service</th>
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#### Measure Data Collection

**Step 1** Determine if the patient is eligible for this measure by answering the questions below.

Did the patient undergo general or neuraxial anesthesia?  
Yes □  No □

Was the duration of general or neuraxial anesthesia 60 minutes or greater?  
Yes □  No □

If **Yes** to both questions, proceed to the next step.

If **No** to any of the questions, **STOP**. The patient is not eligible for this measure.

**Step 2** Determine if the patient has met other requirements for this measure by answering the question below.

Did the patient have physician/APN/PA documentation of intentional hypothermia for the procedure performed?  
Yes □  No □

If **Yes**, **STOP**. The patient is not eligible for this measure.

If **No**, proceed to the next step.

**Step 3** Determine if the patient was normothermic according to the measure requirements by answering the questions below.

Was the patient’s temperature taken within 15 minutes of arrival in PACU?  
Yes □  No □

Was the patient’s temperature equal to or greater than 96.8° F / 36° C?  
Yes □  No □

If **Yes** to both questions, the patient was normothermic according to the requirements of this measure.

If **No** to any of the questions, the patient was not normothermic according to the requirements of this measure.

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